



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,486	10/16/2003	Chris Thomas	THO1-H30	2164
7590		01/04/2010	EXAMINER	
Karl M. Steins Steins & Associates Suite 120 2333 Camino del Rio South San Diego, CA 92108			CONNOLLY, MARK A	
			ART UNIT	PAPER NUMBER
			2115	
			MAIL DATE	DELIVERY MODE
			01/04/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,486	<b>Applicant(s)</b> THOMAS ET AL.
	<b>Examiner</b> MARK CONNOLY	<b>Art Unit</b> 2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 October 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) 3,5 and 6 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-6 recites the limitation "the cable." There is insufficient antecedent basis for this limitation in the claim. It is believed that the "bus connection" found in claim 1 represents what is being referred to with the later claimed cables and therefore, the "bus connection" in claim 1 is interpreted as a "cable connection."
3. Claims 3 and 5-6 recites the limitation "the termination resistors." There is insufficient antecedent basis for this limitation in the claim. It is believed that the "termination circuitry" found in claim 1 represents what is being referred to with the later claimed resistors and therefore, the "termination circuitry" in claim 1 is interpreted as a "termination resistors."

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art [AAPA] in view of Illegems PG PUB 2004/0012449.
6. Referring to claim 1, the AAPA teaches the invention substantially including:
  - a. a controller for automatic adjustment of power consumption level of a device as to whether or not an effective cable connection being made, a self-calibrated oscillator, a

“tone” transmitter, a “tone” receiver and termination resistors [14, 16, 18, 20, 22 fig. 1 and pgs. 3-4 lines 7-14].

Although the AAPA teaches the invention substantially above, it is not explicitly taught to include a current reference with temperature control. Illegems teaches generating a stable temperature-invariant oscillation frequency by generating a current reference while compensating for temperature variations [abstract and ¶0017]. Because of the high speed nature of the IEEE 1394 serial bus it is well known in the art that a stable oscillation frequency is needed to ensure reliable operation as any differences in frequency, jitter etc... can cause errors with respect to transmitting data from one device via a first clock and sampling/recovering the received data at another device via second clock. In addition, it is also further well known that devices and their components are subject to temperature variations during operation. Due to the need for 1394 serial bus devices to have stable clocking mechanisms, it would have been obvious to include the teachings of Illegems into the AAPA system since the AAPA teaches a 1394 serial bus system but does not detail any precautionary measures to ensure stable oscillation.

7. Referring to claim 2, the AAPA teaches reducing power in the unconnected mode by disabling the tone transmission [pg. 4 lines 3-10].

8. Referring to claim 4, Illegems teaches dynamically adjusting the oscillator (i.e. calibrating) in response to changes in temperature in order to maintain a consistent clock output. Because temperature changes occur during normal operation, it is interpreted that in the AAPA-Illegems system that the adjustments would occur during normal operation of the IEEE 1394 device while connected via cable to another device.

*Allowable Subject Matter*

Art Unit: 2115

9. Claims 3 and 5-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK CONNOLLY whose telephone number is (571)272-3666. The examiner can normally be reached on M-F 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Connolly/  
Primary Examiner, Art Unit 2115  
12/30/09

Mark Connolly  
Primary Examiner  
Art Unit 2115